

Ohio EPA Policy	<b>National Pollutant Discharge Elimination System; Wastewater Discharges Resulting from Clean-up of Response Action Sites Contaminated with Volatile Organic Compounds</b>	
DSW-0100.027  <b>Removed</b>	Statutory references: Rule references:	Ohio EPA, Division of Surface Water Revision 0, September 22, 1994 Revision 1, September 30, 1999 Removed, December 21, 2006
<p><b>THIS POLICY DOES NOT HAVE THE FORCE OF LAW</b> Pursuant to Section 3745.30 of the Revised Code, this policy was reviewed and removed.</p>		

This policy does not meet the definition of policy contained in Section 3745.30 of the Ohio Revised Code. Ohio EPA is removing this document from the Division of Surface Water Policy Manual and is considering addressing this topic in internal guidance.

**For more information contact:**

Ohio EPA, Division of Surface Water  
Permits & Compliance Section  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614) 644-2001

Ohio EPA Policy  DSW-0100.027  <b>Final</b>	<b>National Pollutant Discharge Elimination System; Wastewater Discharges Resulting from Clean-up of Response Action Sites Contaminated with Volatile Organic Compounds</b>	
	Statutory references: ORC 3734.13, 3734.20, 3745.01, 3750.06, 6111.03, 6111.041, 6111.45 and 6111.46 Rule references: OAC 3745-1, 3745-31-02 and 3745-33	Ohio EPA, Division of Surface Water Revision 0, September 22, 1994 Revision 1, September 30, 1999
THIS POLICY DOES NOT HAVE THE FORCE OF LAW Pursuant to Section 3745.30 of the Revised Code, this policy was reviewed on the last revision date.		

### **Purpose**

The purpose of this policy is to establish guidelines for the disposal of wastewaters resulting from the clean-up of response action sites contaminated with volatile organic compounds (VOCs), and to outline the operating interfaces between the Division of Surface Water (DSW) and the Division of Emergency & Remedial Response (DERR) of the Ohio EPA for the control of such disposal into waters of the state.

### **Background**

#### Approval of Disposal Plans

Approval of plans for treatment and disposal of wastewater is required by the director of Ohio EPA in accordance with ORC 6111.45. Depending upon the approved methods of treatment/disposal, National Pollutant Discharge Elimination System (NPDES) permits and Permits to Install (PTI) may be required.

Discharge to a sanitary sewer is subject to acceptance by the publicly-owned treatment works (POTW) and may require an Indirect Discharge Permit (IDP) if the POTW does not have an approved pretreatment program.

#### Applicability

This policy applies to any cleanup action, covered under the discharge categories listed on pages 2 and 3, which results in the discharge of VOC-contaminated wastewater to surface waters of the state, to a sanitary or storm sewer system, or hauling off-site any such wastewater to a POTW.

This policy identifies treatment technologies and discharge criteria which apply only to the VOCs identified in Attachment 1 of this policy. Other pollutants, if present or reasonably expected to be present, may require additional site-specific evaluation by both DERR and DSW.

This policy may not apply to wastewater discharges proposed within 500 yards of a public

water supply surface water intake. All wastewater discharges proposed within 500 yards of a public water supply surface water intake should be evaluated by DSW to determine if more stringent criteria than those established by this policy are required.

#### Points of Contact

DERR's Remedial Response Section Site Coordinator will serve as the initial point of contact between the discharging entity and other Ohio EPA program divisions for discharges resulting from response actions at active DERR sites. The appropriate District Office-DSW Group Leader shall serve as the initial point of contact between the discharging entity and other Ohio EPA program divisions for discharges resulting from response actions at all other sites. All permit-related correspondence and data transmitted between DERR and DSW shall be copied to the DSW Central Office Industrial Permit group leader.

#### Discharge Categories:

Response activities which generate VOC-contaminated wastewaters can be divided into the two following categories:

- I. SHORT-TERM DISCHARGE CATEGORY (less than 180 days):
  1. Pump Tests: Less than 30-day discharge. Aquifer pump tests are often required to obtain data necessary for design of extraction and treatment systems. Pump tests can provide information to assist in estimating the rate of ground water withdrawal (volume of flow) and identifying contaminants and contaminant concentrations expected to be present in the treatment system influent.
  2. Treatability Tests: Treatability tests are conducted to determine if a given technology can meet expected clean-up goals for the site and to establish the design and operating parameters for optimization of technology performance. While technologies for removal of VOCs from wastewaters are well understood, treatability testing may be required in those situations where the potential treatment plant influent requires further characterization, innovative technologies are proposed, or there is reason to believe that naturally-occurring parameters such as iron, total organic carbon or total dissolved solids have the potential to adversely affect treatment equipment.
- II. LONG-TERM DISCHARGE CATEGORY (exceeds 180 days):
  1. Interim Actions: Interim response actions are implemented when there is a need to rapidly stabilize or otherwise address a response action site (e.g., contamination has been detected in the vicinity of and migrating toward a drinking water supply well; leachate seeps present a direct contact threat, etc.). Some interim response actions provide gradient control to intercept and prevent the continued migration of a contaminant plume. Interim response actions can be implemented at any time during site investigation or remediation. In these situations, the interim action is a single component of a long-term comprehensive remediation and may be implemented prior to completion of the comprehensive remedy selection process.
  2. Remedial Actions: Remedial actions are comprehensive multi-media remedies which are implemented following completion of a Remedial Investigation/Feasibility Study

(RI/FS). Treating wastewaters which are contaminated with VOCs is often part of comprehensive remedial actions where ground or surface water has been identified as one of the affected media requiring remediation. If, for technical reasons, the source of contamination cannot be removed as part of the comprehensive remedial action, treatment systems may be required to operate at the site for an extended period of time.

### **Methods of Disposal and Procedures**

Methods of disposal of VOC-contaminated wastewaters include discharge to surface water, discharge to sanitary sewer, discharge to storm sewer, or transport to an off-site POTW.

#### Information required for all pump tests, treatability tests, interim and final remedial response actions:

The DERR Site Coordinator or the regulated entity will submit the following information to the Central Office-DSW, Industrial Permits group leader and to the appropriate District Office-DSW when requesting discharge criteria:

1. Discharger Name (site name).
2. Discharger Location - City, County and a portrayal of the routing of the discharge to the ultimate point of discharge to a receiving stream should be detailed on a topo or USGS Quad map and, if necessary, a more detailed or larger scale map.
3. Cause - Source of contamination (what is known at the time), origin of waste, etc.
4. List of Pollutants - A complete list of all parameters previously analyzed for, including identification of analytical methods and detection limits employed during analysis, and providing the range of concentrations for all parameters detected.
5. Flow rate, or range of flow rate if exact flow rate is not known or if flow is expected to vary.
6. Date discharge is expected to commence.
7. Duration of discharge - Give an outside limit.

Application for discharge to a storm sewer must be accompanied by written permission of the owner(s) of the storm sewer from the point of the proposed discharge to the sewer to the point of ultimate storm sewer discharge to waters of the state.

#### Discharges to Surface Water or Storm Sewer

Pump Tests: For pump tests, compliance with a general NPDES Permit **will be** required, when it becomes effective, but a PTI **will not be** required. To obtain coverage under the General NPDES Permit, when it becomes effective, the entity proposing to discharge shall submit a Notice of Intent (NOI) and all applicable fees to the Ohio EPA, Division of Surface Water, Permits Processing Group. Until the general NPDES permit becomes effective, the entity proposing to discharge shall contact the appropriate district office point of contact (see page

2), for the necessary requirements. Pump test discharges will achieve Ohio Water Quality Criteria (WQC). Sufficient treatment must be applied to those discharges which would otherwise exceed WQC. BATT/BADCT<sup>1</sup> for VOC wastewater treatment systems does not apply.

Treatability Tests: For a treatability test, a general NPDES Permit **will be** required, when it becomes effective, but a PTI **will not be** required. To obtain coverage under the General NPDES Permit, when it becomes effective, the entity proposing to discharge shall submit a Notice of Intent (NOI) and all applicable fees to the Ohio EPA, Division of Surface Water, Permits Processing Group. Until the general NPDES permit becomes effective, the entity proposing to discharge shall contact the appropriate district office, point of contact (see page 2), for the necessary requirements. Treatability test discharges will strive to achieve BATT/BADCT. Treatability test discharges will achieve Ohio Water Quality Criteria.

Interim and Remedial Actions: A PTI and NPDES permit **will be** required for interim and remedial response action projects. Interim and remedial response action discharges will achieve BATT/BADCT. Sufficient treatment must be applied to those interim and remedial response action discharges which would otherwise exceed BATT/BADCT.

A NPDES Permit Application and PTI shall be submitted to the DSW in the appropriate District Office. NPDES Permit Applications (Forms 1 and 2D) shall be submitted to the District Office-DSW in the district in which the regulated entity proposes to discharge. The District Office-DSW will determine whether the NPDES application is complete within 30 days of receipt of the application. The PTI will be initially reviewed within 60 days of receipt of the application, after which the District Office-DSW will make a determination on the completeness of the application.

#### **For Active DERR sites**

**NPDES Permits:** The District Office-DSW shall notify the DERR Site Coordinator when the NPDES application is received. The regulated entity shall provide one copy of the NPDES application to the DERR Site Coordinator. The District Office-DSW and the DERR Site Coordinator shall coordinate review of the NPDES application. The Central Office-DSW permit writer will provide the draft NPDES permit, to be public noticed and subject to revision, to the DERR Site Coordinator for review and comment at least 10 working days before public notice of the permit is made. Once the NPDES permit has been approved by DERR and DSW, the Central Office-DSW will public notice the NPDES permit within 70 days of receipt of the application for off-site discharges at National Priority List (NPL) sites and for all discharges at

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<sup>1</sup> BATT/BADCT: Best available treatment technology/best available demonstrated control technology (BATT/BADCT) for wastewaters generated at VOC-contaminated response action sites, as defined by Ohio EPA, consists of air stripping, carbon columns, or both or equivalent so as to remove VOC's to 5 ug/l or less for each covered VOC parameter present (see page 9 for the list of covered parameters). Permit limitations shall be 5 ug/l, 30 day average and 10 ug/l, daily maximum for each contaminant.

non-NPL

sites. Upon issuance of the NPDES permit, Central Office, DSW will provide the DERR site coordinator with a copy of the issued NPDES permit.

**PTIs:** The District Office-DSW shall notify the DERR Site Coordinator when a PTI application is received. The regulated entity shall provide one copy of the PTI to the DERR Site Coordinator. The District Office-DSW and the DERR Site Coordinator shall coordinate review of the PTI. The District Office-DSW will provide a copy of the PTI recommended for issuance as a final action to the DERR Site Coordinator for review at least five (5) working days before submitting the PTI for processing and issuance to the discharging entity. Upon issuance of the PTI, Central Office, DSW will provide a copy of the issued PTI to the DERR site coordinator.

In general, in the case of both PTI and NPDES permit applications, information shall be reviewed for substantive requirements only (not for issuance as a "final action") for NPL sites where the discharge is occurring on-site (see DERR Policy m DERR-00-RR-001, "ARARs" for background information regarding permit exemptions).

During the permit development, the permit writer may include an interim period during the initial start-up phase after the permit goes effective. A three (3) to six (6) month period would be considered an acceptable amount of time. During this start-up time, the interim effluent limitation(s) of 15 ug/l, daily maximum is recommended.

#### Discharges to Sanitary Sewers

##### For all discharges to sanitary sewers:

1. The entity proposing to discharge shall contact the DSW Pretreatment Coordinator in the appropriate Ohio EPA District Office. The Pretreatment Coordinator will determine the status of the POTW's pretreatment program and provide instructions on how and under what circumstances to apply for a PTI.
2. If the POTW does not have an approved pretreatment program, the entity proposing to discharge will be referred to Ohio EPA's Central Office Pretreatment Unit to determine whether or not an Indirect Discharge Permit (IDP) application will be required.
3. Authorization to discharge to a POTW must be obtained from the POTW.
4. PTI applications shall be submitted to the appropriate Ohio EPA District Office-DSW Group Leader.
5. IDP applications shall be submitted to Ohio EPA's Central Office Pretreatment Unit.
6. PTI applications should address BATT/BADCT or equivalent to achieve VOC-contaminant removal to below 5 ug/l for each covered VOC parameter (see page 9 for the list of covered parameters).
7. In an area without an approved pretreatment program, a minimum of one (1) analysis of liquids to be disposed of shall be made prior to treatment for characterization. Analysis,

monitoring and reporting requirements for effluents will be specified in the documents which authorize discharge.

8. In areas with approved pretreatment programs, the entity proposing to discharge shall comply with the POTW's instructions for monitoring.

#### Hauled Wastewater

Dischargers proposing to haul VOC-contaminated wastewaters to off-site POTWs, without an approved Pretreatment Program, should contact the DSW Pretreatment Coordinator in the appropriate Ohio EPA District Office. Non-hazardous wastewaters hauled to POTWs will require written permission from the POTW and must comply with monitoring provisions and any local pretreatment requirements as established by the POTW. Hazardous wastewaters must be handled in a manner consistent with Ohio's hazardous waste rules. Contact the Division of Hazardous Waste Management in the appropriate Ohio EPA District Office for further information regarding transport, treatment and disposal of hazardous waste.

#### Tracking:

DSW will promptly notify the DERR Site Coordinator whenever submittals covered by this policy are received for active DERR sites. The DERR Site Coordinator will be responsible for tracking progress of any DERR requests made to DSW. Tasking documents shall also be kept on file and tracked in Central Office-DERR to record requests made. Time accounting sheets must be submitted by DSW to the Cost Recovery Unit, Central Office-DERR, for each pay period DSW personnel perform work on issues related to active DERR sites.

#### **Related Policy or guidance**

None

#### **For more information contact:**

Ohio EPA, Division of Surface Water  
Industrial Permit group leader  
P.O. Box 1049  
Columbus OH 43216-1049  
(614) 644-2001

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## Attachment 1

### VOLATILE ORGANIC COMPOUNDS COVERED BY THE VOC BATT/BADCT POLICY

1. Benzene<sup>1</sup>
2. Bromobenzene<sup>1</sup>
3. Bromochloromethane<sup>1</sup>
4. Bromodichloromethane<sup>1</sup>
5. Bromoform<sup>1</sup>
6. Bromomethane<sup>2</sup>
7. 2-Butanone (MEK)<sup>3</sup>
8. n-Butylbenzene<sup>1</sup>
9. Sec-Butylbenzene<sup>1</sup>
10. Tert-Butylbenzene<sup>1</sup>
11. Carbon Disulfide<sup>2</sup>
12. Carbon Tetrachloride<sup>1</sup>
13. Chlorobenzene<sup>1</sup>
14. Chloroethane<sup>2</sup>
15. Chloroform<sup>2</sup>
16. bis-2-Chloroisopropylether<sup>1</sup>
17. Chloromethane<sup>2</sup>
18. o-Chlorotoluene<sup>1</sup>
19. p-Chlorotoluene<sup>1</sup>
20. Dibromochloromethane<sup>3</sup>
21. 1,2-Dibromo-3-chloropropane<sup>3</sup>
22. Dibromomethane<sup>2</sup>
23. 1,2-Dibromomethane<sup>1</sup>
24. 1,2-Dichlorobenzene<sup>1</sup>
25. 1,3-Dichlorobenzene<sup>1</sup>
26. 1,4-Dichlorobenzene<sup>1</sup>
27. Dichlorodifluoromethane<sup>1</sup>
28. 1,1-Dichloroethane<sup>2</sup>
29. 1,2-Dichloroethane<sup>1</sup>
30. 1,1-Dichloroethene<sup>1</sup>
31. trans-1,2-Dichloroethene<sup>1</sup>
32. cis-1,2-Dichloroethene<sup>1</sup>
33. 1,2-Dichloropropane<sup>1</sup>
34. 2,2-Dichloropropane<sup>1</sup>
35. 1,3-Dichloropropane<sup>2</sup>
36. 1,1-Dichloropropene<sup>1</sup>
37. Isopropylbenzene (Cumene)<sup>1</sup>
38. Ethyl Benzene<sup>1</sup>
39. Hexachloro-1,3-butadiene<sup>1</sup>
40. 2-Hexanone<sup>3</sup>
41. p-Isopropyltoluene<sup>1</sup>
42. Methylene Chloride<sup>2</sup>
43. Pentachloroethane<sup>1</sup>
44. n-Propylbenzene<sup>1</sup>
45. Styrene<sup>1</sup>
46. 1,1,1,2-Tetrachloroethane<sup>1</sup>
47. 1,1,2,2-Tetrachloroethane<sup>1</sup>
48. Tetrachloroethene<sup>1</sup>
49. Toluene<sup>1</sup>
50. 1,2,3-Trichlorobenzene<sup>1</sup>
51. 1,2,4-Trichlorobenzene<sup>1</sup>
52. 1,1,1-Trichloroethane<sup>1</sup>
53. 1,1,2-Trichloroethane<sup>1</sup>
54. Trichloroethene<sup>1</sup>
55. Trichlorofluoromethane<sup>1</sup>
56. 1,2,3-Trichloropropane<sup>1</sup>
57. 1,2,4-Trimethylbenzene<sup>1</sup>
58. 1,3,5-Trimethylbenzene<sup>1</sup>
59. Vinyl Acetate<sup>1</sup>
60. Vinyl Chloride<sup>2</sup>
61. o-xylene<sup>1</sup>
62. m-xylene<sup>1</sup>
63. p-xylene<sup>1</sup>

<sup>1</sup>VOC is amenable to removal by either air stripping or activated carbon

<sup>2</sup>VOC is amenable to removal by air stripping but not by activated carbon

<sup>3</sup>VOC is amenable to removal by activated carbon but not by air stripping